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23910	7590	02/07/2008	EXAMINER	
FLIESLER MEYER LLP			OSMAN, RAMY M	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/975,590

Applicant(s)

JACOBS ET AL.

Examiner

Ramy M. Osman

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-21, 23, 24, 26, 28-37 and 42-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-21, 23, 24, 26, 28-37 and 42-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Status of Claims

1. This communication is in response to amendment filed November 21, 2007, where applicant amended claims 14,19-21,23,26,28,31-34, cancelled claims 1-13,22,25,27,38-41, and added new claims 42-67. Claims 14-21,23,24,26,28-37,42-67 are pending.

Response to Arguments

2. Previous 112 second paragraph rejections are withdrawn.
3. Applicant's arguments filed 11/21/2007, with respect to the amendments and new claims, are not persuasive.
4. Applicant argues that amended claims 14,19,20,21 include the new feature of updating the version data in "multiple slave servers", and that this feature is not shown in Miron.

In reply, Miron does disclose this feature. In column 6 lines 33-40, Miron discloses that there are multiple client computers (i.e. multiple slave servers) which can be updated with the version data.

5. Applicant argues that new claims 42,49,55,62 include the new feature of if the slave server "can not use" a first delta then a second delta is sent to the slave server.

In reply, it is noted that the features upon which applicant relies (i.e., "can not use") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Specification

6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claims 49-54 and 62-67 contain the limitation “computer readable medium”. The meaning of this limitation is not ascertainable by referring to the specification. There is no clear support or antecedent basis for this limitation in the specification. Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claims 14-21,23,24,26,28-37,42-67 rejected under 35 U.S.C. 102(e) as being anticipated by Miron (US Patent No6,401,239).**

9. In reference to claims 14,19-21, *[Based upon the claim language of claim 19:]* Miron teaches a method, computer readable medium, system and computer system respectively, for replicating data over a network including a master server and multiple slave servers, the method comprising the steps of:

sending a packet of information from a master server to each slave server on the network, the Information relating to a change in the data stored on the master server and containing a current version number for the present state of the data, the information further relating to previous changes in the data and a version number for each previous change (column 6 lines 19-33 and column 7 lines 50-54);

thereafter, allowing each slave server to determine whether the slave server has been updated to correspond to the current version number (column 7 lines 54-55 and column 12 line 66 – column 13 line 5);

thereafter, allowing each slave server to commit the information if the slave server has not missed a previous change (column 7 lines 57-65); and

allowing each slave server having missed a previous change to request that previous change be sent from the master server to the slave server before the slave server commits the packet of information (column 6 lines 34-62 and column 7 line 60 – column 8 line 5).

10. In reference to claim 15, Miron teaches a according to claim 14, further comprising: committing the packet of information to a slave server (column 12 line 64 – column 13 line 14).

11. In reference to claim 16, Miron teaches a method according to claim 14, further comprising: aborting the commit of the packet of information if a slave server cannot commit the update (column 4 lines 55-67).

12. In reference to claim 17, Miron teaches a method according to claim 14, further comprising: determining the scope of the delta before sending it from the master server (column 7 lines 48-65).

13. In reference to claim 18, Miron teaches a method according to claim 14, further comprising: including the scope of each the previous changes in the delta. (column 7 lines 48-65).

14. In reference to claim 23, Miron teaches method according to claim 21, further comprising: determining whether each of the at least one slave server has sent a response back to the master server (column 12 line 64 – column 13 line 22).

15. In reference to claim 24, Miron teaches method according to claim 21, further comprising: determining whether any of the at least one slave server can commit the data (column 7 lines 5-67).

16. In reference to claim 26, Miron teaches method according to claim 21, further comprising: aborting the data only if any of the at least one slave server cannot process the commit (column 7 lines 55-57).

17. In reference to claim 28, method according to claim 21, further comprising: multicasting the update to any of the at least one slave server that were not able to process the commit (column 12 line 35 – column 13 line 14).

18. In reference to claim 29, Miron teaches method according to claim 21, further comprising: heart beating the new version number to any of the at least one slave server that were not able to process the commit (column 7 lines 48-65).

19. In reference to claim 30, Miron teaches method according to claim 21, further comprising: requesting a delta be sent to a slave server that was not able to process the commit (column 12 line 64 – column 13 line 14).

20. In reference to claims 31-37, *[Based upon the claim language of claim 31:]* Miron teaches a method, a computer readable medium, a computer program product, and a system respectively, for replicating data over a network, the method comprising the steps of:

(a) determining whether the replication should be accomplished in a one or two phase method (column 4 lines 57-67 and column 5 lines 30-40);

(b) sending replication information determined to be accomplished in a one phase method by:

sending a packet of information from the master server to the slave server, the information relating to a change in the data stored on the master server and containing a version number for the present state of the data; thereafter receiving the packet of information to a slave server (column 12 lines 48-55 and column 6 lines 19-33);

thereafter, allowing the slave server to determine whether the data on the slave server has been updated to correspond to the version number (column 12 lines 66 – column 13 line 5); and

thereafter, requesting a delta be sent from the master server to the slave server if the slave server does not correspond to the version number, the delta containing information needed to update the slave server (column 6 lines 34-62 and column 7 lines 57-65);

(c) sending replication information determined to be accomplished in a two phase method by:

sending a packet of information from the master server to the slave server, the information relating to a change in the data stored on the master server and containing a

version number for the present state of the data (column 12 lines 48-55 and column 6 lines 19-33);

thereafter, allowing the slave server to determine whether the slave server has been updated to correspond to the version number, and to further determine whether the slave server can process the packet of information (column 12 lines 66 – column 13 line 5);

thereafter, sending a signal from the slave server to the master server indicating whether the slave server needs to be updated and whether the slave server can process the packet of information (column 6 lines 34-62 and column 7 lines 57-65);

thereafter, sending a response signal from the master server to the slave server indicating whether the slave server should commit to the packet of information; and committing the packet of information to the slave server if so indicated by the response signal (column 12 lines 66 – column 13 line 22).

21. In reference to claim 42, Miron teaches a method comprising:

at a slave server, receiving a first delta update from a master server, the first delta update being adapted to be used to update data from a first version to a current version; at the slave server, checking whether data at the slave server is the first version; if so, updating the data at the slave server with the first delta update (column 6 lines 34-52 and column 7 lines 47-65);

if not, requesting a second delta update from the master server, the second delta update being adapted to update from a second version to the current version; wherein when the second delta update is requested, the slaver server receives the second delta update from the master

server and uses the second delta update to update the data at the slave to the current version (column 7 line 60 – column 8 line 5).

22. In reference to claim 43, Miron teaches the method of claim 42, further comprising: storing an original copy of the data on the master server (column 8 lines 15-30 & 49-67).

23. In reference to claim 44, Miron teaches the method of claim 42, further comprising: persistently caching the data on a local disk for each slave server (column 8 lines 15-30 & 49-67).

24. In reference to claim 45, Miron teaches the method of claim 42, further comprising: determining a unique version number for the current state of the data on the master server if the data has changed (column 12 line 64 – column 13 line 14).

25. In reference to claim 46, Miron teaches the method of claim 42, wherein if the first delta update is to be committed, the first delta update is committed in a transactional manner (column 7 lines 45-55).

26. In reference to claim 47, Miron teaches the method of claim 46, wherein the slave server sends a message to the master server when it is ready to commit the first delta update (column 7 lines 45-55).

27. In reference to claim 48, Miron teaches the method of claim 47, wherein when all of the slave servers are ready to commit the first delta update, the master server sends a commit message to all of the slave servers (column 7 lines 57-65).

28. In reference to claims 49-54, these are computer readable medium claims that correspond to the method claims of claims 42-48. Therefore, claims 49-54 are rejected based upon the same rationale as given for claims 42-48 above.

29. In reference to claims 55-61, these claims correspond to the method claims of claims 42-48. Therefore, claims 55-61 are rejected based upon the same rationale as given for claims 42-48 above.

30. In reference to claims 62-67, these are computer readable medium claims that correspond to the method claims of claims 42-48. Therefore, claims 62-67 are rejected based upon the same rationale as given for claims 42-48 above.

Conclusion

31. The above rejections are based upon the broadest reasonable interpretation of the claims. Applicant is advised that the above specified citations of the relied upon prior art are only representative of the teachings of the prior art, and that any other supportive sections within the entirety of the reference (including any figures, incorporation by references, claims and priority documents) is implied as being applied to teach the scope of the claims.

32. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramy M. Osman whose telephone number is (571) 272-4008. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RMO
February 3, 2008


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